# ARRA Traffic Improvements -- No. 501002

Category Subcategory Administering Agency Planning Area Transportation
Traffic Improvements
Transportation
Countywide

Date Last Modified Required Adequate Public Facility Relocation Impact Status July 01, 2009 No None.

Preliminary Design Stage

# **EXPENDITURE SCHEDULE (\$000)**

| Cost Element                      | Total | Thru<br>FY08 | Rem.<br>FY08 | Total<br>6 Years | FY09 | FY10  | FY11  | FY12 | FY13 | FY14 | Beyond<br>6 Years |
|-----------------------------------|-------|--------------|--------------|------------------|------|-------|-------|------|------|------|-------------------|
| Planning, Design, and Supervision | 0     | 0            | 0            | 0                | 0    | 0     | 0     | 0    | 0    | 0    | 0                 |
| Land                              | 0     | 0            | 0            | 0                | 0    | 0     | 0     | 0    | 0    | 0    | 0                 |
| Site Improvements and Utilities   | 2,775 | 0            | 0            | 2,775            | 0    | 1,675 | 1,100 | 0    | 0    | 0    | 0                 |
| Construction                      | 0     | 0            | 0            | 0                | 0    | 0     | 0     | 0    | 0    | 0    | 0                 |
| Other                             | 0     | 0            | 0            | 0                | 0    | 0     | 0     | 0    | 0    | 0    | 0                 |
| Total                             | 2,775 | 0            | 0            | 2,775            | 0    | 1,675 | 1,100 | 0    | 0    | 0    | 0                 |
| FUNDING SCHEDULE (\$000)          |       |              |              |                  |      |       |       |      |      |      |                   |
|                                   |       |              |              |                  |      |       |       |      |      |      |                   |

| Fed Stimulus (State Allocation) | 2,775 | 0 | 0 | 2,775 | 0 | 1,675 | 1,100 | 0 | 0 | 0 | 0 |
|---------------------------------|-------|---|---|-------|---|-------|-------|---|---|---|---|
| Total                           | 2,775 | 0 | 0 | 2,775 | 0 | 1,675 | 1,100 | 0 | 0 | 0 | 0 |

### DESCRIPTION

This project provides for various traffic improvements to be funded under the American Recovery and Reinvestment Act (ARRA) Federal economic stimulus program.

- (1) Advance Transportation Management System (Fiber Optics) (\$600,000) Installation of fiber optic cable plant along the US29 corridor from the current terminus at Briggs Chaney Road to the Howard County line (5.5 mi.)
- (2) Streetlight Installation on MD124 (\$1,100,000) Installation and energizing of lights (approximately 150)
- (3) Traffic Signals UPS/BBU (\$600,000) Deployment of Uninterruptible Power Supply (UPS) / Battery Backup (BBU) at approximately 40 traffic signals
- (4) Traffic Sign Upgrades (\$250,000) -Upgrade or replacement of traffic warning signs with fluorescent micro-prismatic sign sheeting
- (5) Guard Rail End Treatments (\$225,000) -Replacement of deficient and/or substandard guardrail end treatments to meet current standards (approximately 75)

## JUSTIFICATION

- (1) Advance Transportation Management System (Fiber Optics) will facilitate the deployment of new traffic signal control features and functionality.
- (2) Streetlight Installation on MD124

Maryland State Highway Administration (MSHA) is currently reconstructing this stretch of road, which is suburban with numerous commercial zones, but is not installing lighting as part of their project. Installation of streetlights along MD124 between Air Park Road and Rosewood Manor Lane will improve safety. At the County's request, MSHA has agreed to install conduits and handboxes for a pedestrian lighting system. The County will install and energize the lights.

- (3) Traffic Signals UPS/BBU mitigates the vulnerability of the traffic control system due to loss of electrical power during storms or in the case of an evacuation.
- (4) Traffic Sign Upgrades improves visibility and traffic safety, particularly during low light and inclement weather situations.
- (5) Guard Rail End Treatments improves traffic safety and reduces the severity of run-off-the-road accidents.

### OTHER

Plans and Studies:

Streetlight Installation on MD124: MSHA Contract No. MO6325171

Traffic Signals UPS/BBU: Concept of Operations, Version: Revision I, dated February 8, 2007; System Requirements, Version: Revision F, dated May 16, 2007

Traffic Sign Upgrades: Manual on Uniform Traffic Control Devices

Guard Rail End Treatments: Current MSHA guardrail standards and Montgomery County Department of Transportation 2004 guardrail study.

Pedestrian Safety Impact analyses, have, or will be completed for these projects.

## FISCAL NOTE

Funding is provided under the Federal economic stimulus ARRA, Local Highway Allocation, awarded to the County through a Highway Improvements Program grant. Total grant funds are \$8.49M and do not require a County match. See the ARRA Highway Improvements project (#501003) for the remainder of the grant.

Conditions precedent to disbursement of the grant require the State of Maryland to approve planning, specifications and estimates as well as the low, responsive and responsible bidder for construction.

| APPROPRIATION AND                    |   |         | COORDINATION                          | MAP        | A  |
|--------------------------------------|---|---------|---------------------------------------|------------|--|
| EXPENDITURE DATA                     |   |         | Maryland State Highway Administration |            | 360  |
| Date First Appropriation             | FY10                                    | (\$000) |                                       |            |  |
| First Cost Estimate<br>Current Scope | FY10                                    | 2,775   |                                       |            |  |
| Last FY's Cost Estimate              | *************************************** | 0       |                                       | 200        | 27 124   |
| Appropriation Request                | FY10                                    | 0       |                                       | 109        | Temporal Contraction of the Cont |
| Supplemental Appropriation Re        | equest                                  | 2,775   |                                       | 117        | 650  |
| Transfer                             | •                                       | 0       |                                       | 107        | 970  |
| Cumulative Appropriation             |   | 0       |                                       |            | 355 97   |
| Expenditures / Encumbrances          |   | 0       |                                       | 1 Dead     | 29   |
| Unencumbered Balance                 |   | 0       |                                       |            |  |
| Partial Closeout Thru                | FY07                                    | 0       | ž                                     |            |  |
| New Partial Closeout                 | FY08                                    | 0       |                                       |            | 190 0 1 2 : miles  |
| Total Partial Closeout               |   | 0       |                                       | × , p. s : |  |